

**Table 3.0-4. Estimates of Unappropriated SAR Water Available for Capture by Muni/Western for Base Period WY 1961-62 through WY 1999-2000**  
**Project Diversion Capacity of 500 cfs**  
 (Values in Acre-Feet)

Scenario	Project Scenario D														Project Scenario B	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Senior Claimant Diversions	User-Specified Rate of up to 88 cfs								Historical Diversions							
Conservation District Diversion	Historical Diversions				Licensed Right (up to 10,400 afy)				Historical Diversions				Licensed Right (up to 10,400 afy)			
Environmental Habitat Release	1,000 cfs / 2 days		Other Habitat Treatment		1,000 cfs / 2 days		Other Habitat Treatment		1,000 cfs / 2 days		Other Habitat Treatment		1,000 cfs / 2 days		Other Habitat Treatment	
Seasonal Storage	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>Cumulative Total</b>	<b>(39-Year Base Period)</b>															
Senior Claimant Diversions	1,416,606	1,416,607	1,416,607	1,416,608	1,416,605	1,416,608	1,416,610	1,416,610	1,038,137	1,038,139	1,038,139	1,038,138	1,038,128	1,038,132	1,038,131	1,038,134
Reservoir Evaporation	3,218	3,196	3,234	3,196	3,328	3,196	3,380	3,196	5,734	5,608	5,783	5,608	6,029	5,608	6,081	5,608
Conservation District Diversion	398,466	398,466	398,466	398,466	107,060	107,060	107,060	107,060	404,980	404,980	404,980	404,980	193,483	193,483	193,483	193,483
Environmental Habitat Release	27,769	27,769	-	-	35,703	35,703	-	-	35,703	35,703	-	-	39,670	35,703	-	-
<b>Total Muni/Western Potential Capture</b>	<b>407,312</b>	<b>400,599</b>	<b>431,097</b>	<b>420,165</b>	<b>680,406</b>	<b>663,260</b>	<b>712,085</b>	<b>688,520</b>	<b>748,045</b>	<b>727,788</b>	<b>768,762</b>	<b>740,623</b>	<b>954,556</b>	<b>916,718</b>	<b>981,931</b>	<b>936,212</b>
Undiverted from SAR*	38,503	45,237	42,470	53,439	48,772	66,047	52,739	76,488	59,275	79,656	74,210	102,525	60,008	102,230	72,248	118,437
<b>Total</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>	<b>2,291,874</b>
<b>Average Annual</b>																
Senior Claimant Diversions	36,323	36,323	36,323	36,323	36,323	36,323	36,323	36,323	26,619	26,619	26,619	26,619	26,619	26,619	26,619	26,619
Reservoir Evaporation	83	82	83	82	85	82	87	82	147	144	148	144	155	144	156	144
Conservation District Diversion	10,217	10,217	10,217	10,217	2,745	2,745	2,745	2,745	10,384	10,384	10,384	10,384	4,961	4,961	4,961	4,961
Environmental Habitat Release	712	712	-	-	915	915	-	-	915	915	-	-	1,017	915	-	-
<b>Total Muni/Western Potential Capture</b>	<b>10,444</b>	<b>10,272</b>	<b>11,054</b>	<b>10,773</b>	<b>17,446</b>	<b>17,007</b>	<b>18,259</b>	<b>17,654</b>	<b>19,181</b>	<b>18,661</b>	<b>19,712</b>	<b>18,990</b>	<b>24,476</b>	<b>23,506</b>	<b>25,178</b>	<b>24,005</b>
Undiverted from SAR*	987	1,160	1,089	1,370	1,251	1,694	1,352	1,961	1,520	2,042	1,903	2,629	1,539	2,621	1,853	3,037
<b>Maximum Annual</b>																
Senior Claimant Diversions	58,528	58,528	58,528	58,528	58,528	58,528	58,528	58,528	45,245	45,245	45,245	45,245	45,245	45,245	45,245	45,245
Reservoir Evaporation	278	273	278	273	343	273	343	273	410	368	410	368	551	368	573	368
Conservation District Diversion	56,953	56,953	56,953	56,953	10,400	10,400	10,400	10,400	48,152	48,152	48,152	48,152	10,400	10,400	10,400	10,400
Environmental Habitat Release	3,967	3,967	-	-	3,967	3,967	-	-	3,967	3,967	-	-	7,934	3,967	-	-
<b>Total Muni/Western Potential Capture</b>	<b>104,294</b>	<b>104,294</b>	<b>108,261</b>	<b>108,261</b>	<b>128,351</b>	<b>126,721</b>	<b>132,318</b>	<b>130,688</b>	<b>145,880</b>	<b>144,520</b>	<b>145,880</b>	<b>144,520</b>	<b>166,402</b>	<b>158,831</b>	<b>173,580</b>	<b>162,064</b>
Undiverted from SAR*	22,101	28,505	26,068	32,472	30,024	41,347	33,991	45,314	34,538	41,841	40,703	47,971	34,745	56,408	38,382	61,109

\* Estimate (on a monthly basis) of the quantity of water remaining in the channel below Cuttle Weir after all diversions have occurred.

Model input variables that are common to all scenarios include the following (variables described in OPMODEL documentation):

- a) Values shown in table for Total Potential Capture and Undiverted from SAR are estimated using OPMODEL and Allocation Model
- b) Synthesized hydrology based on re-operated Bear Valley Dam
- c) Release of continual 3 cfs from dam to account for groundwater interruption by the dam foundation
- d) USGS gage differences and rounding accounted for in senior water claimant diversions
- e) Conservation District diversion capacity = 300 cfs
- f) Release frequency for environmental releases is no more than every 6 months for 8 scenarios with environmental releases
- g) Maximum number of environmental releases = 100% of potential releases for 6 of the scenarios with environmental releases
- h) Maximum annual diversion by Muni/ Western = 200,000 afy
- i) Percent of available dam release un-divertable through Plunge Pool Pipeline = 0%
- j) Flood/Conservation target storages from USACE Feasibility Report and Interim Water Control Plan
- k) Evaporation rates from USACE Feasibility Report